Chapter 29

A few days later I had six of the best artists and writers from the college come to my tower. It was time to get as much knowledge out of my head as possible. Each illusion had 3 sides of information and I had 6 pages per cube face. I spent the rest of the year getting the knowledge from my head to paper. The only other project I worked on was the tunnel through the Appalachians. As I went I through the year I also came up with a few goals.

* I wanted to build a fort on the Galapagos Islands and a navy base. I wanted to prevent future colonists from exploiting the native life. I might even go next year as I had always wanted to visit in my past life
* I wanted to start a second magic school in Merlin. I wanted people to have options in the future.
* I wanted to turn my eyes to space. With the right magics we might be able to explore the solar system.
* I wanted to stop the industrial revolution or at least prevent the pollution associated with it.
* I wanted to try and bring life to desserts, reviving the planet.
* I wanted to bring more people with magic potential to Avalon. If I found them I should bring their entire family.
* I wanted to preserve as much nature as possible.
* I wanted to study the 3 magic objects I had

I had 18 golems digging the tunnel and I had to go every morning to extend to stone tunnel. I was happy to get all the novels out of my head. The printers were overwhelmed. The textbooks were made a priority though. I had already completed all the math book and science books but now history, humanities and other books joined them. I gave the printers a decade worth of work. On December 25th the wedding arrived. My wedding gift was a house inside the walls. It was a nice two story 4 bedroom house. Daphne had asked a lot of questions about modern weddings and it was an excellent affair.

The new year celebration was the happiest yet. Things were going well. Spain lost control of the colonies and we had a track on having the Caribbean islands join the Avalon Empire. Collette’s hold up was we would have to station ships there. We had 2 wooden warships and 4 steamships. The was it. The coal supply was growing but still the 3 steam ships barely operated. The one on the west coast was just stationary.

After the wedding and New Year Carina told me I needed to have more children. She had talked with Riona and understood how much more powerful my children were. I agreed with her and tried to kiss her but she stopped me and said with other women. I took a deep breath and said no. I had planted the magic seed and at this time I was done.

In January I had my shipwright Armon visit Avalon and we spent two weeks designing a new ship testing various model hulls. It was 119’ feet in length. It had two cannons on turrets. Both cannons would be breach, located on deck and use shaped shot for accuracy. Rate of fire for the cannon would be about 30 seconds. The ship would be a steam ship capable of ocean travel. We decided the crew would be 4 officers, 4 support staff, 28 sailors, 42 marines. It would have cabins for 8 passengers and a VIP cabin. It had 3 decks, with the lower deck dedicated to the steam engine and coal storage. The mid deck was storage, the mess and cargo. The next deck was crew and passenger quarters. Above deck the stern castle had two levels officers country and a separate suite for VIP passengers. There was a short mast with a crows nest but this ship had no sail. We needed to get production of the large shells for the cannon going. So I made 2 cannons for my arms factory to figure it out. Would two powerful cannons be enough to enter combat in this age? The gun should be able to have an effective range of 2 miles and the ship should be much faster than all the ships of the era. We went to Pendragon in February and I built the ship in a few days. The naval school there was using the lake to train so they had the ship to try out and they had 15 rounds of ammo to try out.

I didn’t stay to watch them but returned to Avalon. Three weeks later they gave me the updated ship design. It had twenty or so changes they felt would help. So I had my quick and easy to build small combat warship for patrolling. This ship was also 40% faster than my first steamship designs. I talked with Ameila and we had enough sailors to man 6 of these ships, 9 if we stripped our other ships. Ok the last report had the arms factory able to make 50 of these cannon rounds a day. Each ship would set sail with 400 rounds…so basically a week of production. We were buying coal from the northern English colonies and could easily supply fuel for these ships. I told Amelia to transfer two crews to Panama, we would be building another town on the other coast and those sailors would be patrolling the other ocean. I needed 600 people, 400 for the other town and 200 to station in the Galapagos Islands. Next January I would head down there to build a rail line across the ismuthus to connect the towns. Then I would build two ships and a naval base in the new town.

In March, 1686 I made a trip to Camelot and constructed 9 of the new ships. As they got enough ammo and coal they started patrols. We had a pirate problem in the Caribbean starting from all the unrest. By the end of April the new ships had sunk 7 ships.

The tunnel through the Appalachian was finally finished on April 19th, 1686, it was a series of 8 tunnels. It was going to open up the west. My focus switched to making rails. I was getting efficient at making rails and could make two miles a day of tracks and still have magic and time for other things. The coastal rail line was only halfway to Savannah so they now had to decide which one was more important with the limited rails I was making. In June I visited the Olympic village. They had buried the utility and drainage lines I had built last time. So I spent my time making the wide walking paths above the rainwater drains and also finished lining the rowing venue lake. Most of the work going on now was bringing in large amounts of stone on the trains and putting them near future structures. The first week of July I was working on building the boath\*ouse by the lake and the group that had been traveling abroad had returned. They were stopping at the site on the way back to Avalon and fortuned upon me. The trip was somewhat effective. The biggest problem was a lot of people were lobbying for their own sports to be included. They estimated 2500 international athletes representing 25 different countries. The women’s events would be undersubscribed. That was fine as I didn’t expect this project to get completed. I spent another day working finishing my work and then flew to the magi tower.

Things had changed. The magi counsel now had 4 more members, Riona, Maya, Daphne, Chantelle and Me. I found out I was the grand magi and my voting power was 3 and the others were 1. This allowed them to pass business if I wasn’t present. The structure of the tower and education had changed. The best thing I heard as they went through updates was that Leo and Luke were advancing in stone spellcraft and were making a dozen stone toilets every night during their practice along with some coins. The toilets were sold in town and they received the profits. Liana had a spell that allowed her enchant two gems to resonate with each other. They had a range of 50 miles right now but would increase as she leveled the spell. This was good news and I went and made her a few hundred gems to practice her spell. Liana said the enchantment lasted about 12 years currently.

Talking with Amelia the next day she gave me an update on our military. The 9 FAV steam ships were all crewed with experienced crews and she had enough to crew 3 more with green crews. The FAV was the naval acronym for Fast Attack Vessel. Amelia wanted to ask me to make 3 more of the ships to be based in Havana. Apparently the island was now part of Avalon. I thought for a long time. I agreed but I wanted Maya to scan the crews for loyalty. Last thing I wanted was one of my ships getting captured. I asked her to get 4 FAV crews to Panama for the FAV boats by January. They would be our Pacific fleet once I built them in the Pacific. Two would be stationed in Merlin, one in Panama and one in the Galapagos islands. They would rotate every 6 months. I also needed 50 men to man a fort on Panamas west coast and 50 for the fort in the Galapagos. We had 56 volunteers from the college to study the islands uniqueness and 158 colonists. I set the population of the island to a max of 5,000 in a single town. Only one town in all the islands but the plan was to build stone piers on the other islands so the research teams could easily dock for research trips. The only town would eventually have 4 FAV boats to patrol. The town was scheduled to be built on the eastern side of the largest island.

I spent some weeks making rails and wandering around the farms, orchards, construction projects and the magi tower. There was so much to do. I made some lens for microscopes and telescopes. I corrected the soil on a few dozen trees that were not doing well. I built some garden paths and fountains. In town I added a 3rd story to a few buildings, more to show off than for purpose. I toured the sewers. About 40% of the city had water and sewer hookups. Another 30% had the sewer underneath and were waiting for crews to hook them up. We had a crew of 30 plumbers working on it. I needed to get those plumbers to the Olympic village. The problem was the copper pipes were in limited supply. I had Amelia arrange to get more copper to the furnace extruder. How much copper would be needed for the Olympic village? Ugh.

In October I found things were not going well in Panama. Disease was a big problem and we were starting to have trouble recruiting people. I wondered if I should change where the canal should be built. All other options were much longer with more difficult terrain. Well I was heading down there soon.

December rolled around and things were going well. The railroad reached Lancelot and then they started focusing on finishing the rail to Savannah which needed about 75 miles more. I was getting ready for my next trip. We had come up with some designs for the Galapagos island village, port and cannon battery. It would take me about 6 weeks to build everything myself once I got there. The personnel were lined up. I would have to build the rail line, 27 miles, and the town on the west side of Panama, another 2 months of work, and 6 FAVs as well. This was going to be about a 6 month trip when I started putting all the dots together. I open the note from Riona. Able, Oliva, Summer and 5 other mages in training were slated to come with me. Able and Olivia had nature and healing magic but Summer was just lightning. Under notes I found she was listed as defense. The 5 other mages had a mixture of healing, earth and water magic affinities. The comm crystals now had a range of 65 miles and she could now link 3 gems. I had 5 sets of three gems for the journey.

After the admissions for the knight and magi academies we left Avalon for Camelot. I had 4 children enter the magi academy. In Camelot I built 3 more FAVs before my expedition team took off in the large older steam ship. We made a direct trip to Panama. The colony town was at 1800 people. We made our way and cured disease in the town. Over the next month I worked on building the 27 miles of rail road to the opposite coast and building train stations at both coasts. We had a smaller train steam engine and tracks. Then I spent another month building the docks, defense battery, and 4 FAVs. For the town I just built 4 general building. Housing was up to them. The mages spent most of their time at the coffee and cocoa plantations helping them expand and increasing the quality of life. The 11 golems I brought with me mostly cleared land for the rail line and for farms on the west coast. I wasn’t too impressed with my ship crews for the Pacific. We only had enough sailors for 3 of them and they were terrible. I was happy each ship only had 30 rounds for their cannons. On March 24th we finally set off for the Galapagos. We had enough coal for just one ship so we took two ships. One powered by my magic and the other powered by coal.

We got lost, incompetent navigators. It was suppose to be a 4 day journey but ended taking 9 days. I was angry but what are you going to do. We made to the large island and found the site I wanted. My first two days were spent make two stone piers. I made two because it allowed our two ships to dock between them and get some shelter if the winds picked up. The golems started on clearing land for farming. We planned to only use two square miles for food cultivation and one square mile for orchards. The mages with me were working on planting and putting a small wall around the land. On shore I built 2 towers, each was 40’ high and had 3 cannons on turrets. They flanked the docks. The next building was a large 3 story stone building. The first floor was administration, the second floor was the barracks and the 3rd floor was food storage. Then I built a research building, also 3 stories, first floor was a dining hall for military and scientists. The second floor were research labs and offices. The 3rd floor was housing for up to 50 researchers. By now the civilians were getting antsy. I started building the main street with buildings, tavern, bakery, leather worker, blacksmith, church, butcher, tailor and carpenter. The island resources were only to be used in an emergency. They had 6 months of food and should be gathering crops almost immediately with the mages help. My final buildings were 34 residential buildings. The shops had apartments above so these were for the herders, farmers and orchard overseers. The herders had nothing to do though as the chickens and cows did not make this trip. We didn’t want invasive species to upset the habitat so the chickens and cows would be secure. I really didn’t like the crews of these ships. They grounded the FAVs 4 times in the months we had been here. I built six fishing boats as my final contribution and also spent three days working on maturing orchard trees and perfecting the soil. The mages had done a great job but I just was so much better.

June 19th we finally left the islands. One ship remained and it was going nowhere. It was out coal. I powered the ship I was in back to Panama. We had planned to go to Merlin originally but were behind schedule and needed to get back to start getting supplies to the Galapagos research town. I hadn’t built the piers on the other islands but they could manage. Four days later we were in Panama and taking the train across. There were no ships there so I built another FAV, it was almost automatic now having used the plans so much. I and the mages and 3 researchers who decided to return manned the ship. We loaded a small cargo of cocoa beans and food. After heating the stone for the engine I went on bridge to steer the ship.

Well it was not as easy to navigate as I thought. We ended out by Puerto Rico instead of Cuba. Then as we headed north a storm appeared to the east…a bag hurricane. I decided to head due north to outrun it. When we finnaly turned east in search of land a few days later we ended up in Maryland. Then followed the coast back to Avalon. Well the kids were not impressed but I had gotten us home even if it took an extra 5 days. The morning of July 3rd we were on a train to Avalon.

Well a lot was happening in Avalon. There were 12 active foreign embassies now. Including the czar of Russia (moscovy). Collette was going nuts trying to coordinate the hostilities of the diplomats. The biggest concern she had was the church had switched to full propaganda, now anything bad that was happening in the world was due to the magic of Avalon. Collette and Amelia needed my help so for the next six days I had lunches and dinner with the ambassadors and retinue. France wanted to resume loaning troops to Avalon. Although we were stretched thin I declined. We had basically been funding French forces that they could pull when they wanted. Amelia said we only had 329 remaining French troops on our payroll. The others had retired, become Avalon citizens or returned to France. I knew Amelia was short about 2500 army and 1000 sailors. She had wanted me to negotiate but best to cut this military alliance now. The French asked about purchasing FAVs and 5 shot rifles. Denied. The meetings with Portugal, Spain and Scotland went the same way. They wanted our technology but didn’t have anything or worth to trade. The Ottoman and China ambassadors wanted more trade in magic and to have us train mages for them. The Russians wanted me to visit and take in the hospitality and culture of the Russians. Hmmm. I said I would be happy to in the near future. The Dutch and England wanted military support from us which had me baffled. Denied. Denmark and Sweden wanted help with the plague. At least they had their citizens in mind. Well I was going to Russia so maybe. In return I got open immigration because we needed bodies. This meant the governments would basically be sending their poor and undesirables to us. Poland wanted help with food production. I guess they also had trouble with disease and harsh weather causing famine. Well they could come to Avalon and we would feed them and find them work. The new Spain government in South America was seeking peace and trying to stop us from annexing the islands. I had thought there was already an agreement in place for the islands. Guess not. We controlled Havana and 3 other Spanish cities and about 60% of the islands. We had control up to about Haiti. Everything east was still disputed. I said we were willing to have open trade with New Spain but we were claiming all islands up to and including where the modern British and US virgin islands were. We had initiated some hard environmental settlement laws so the land would not be pillaged. Right now it just included fines but I wanted Avalon to try and live in harmony with the land. I met with the Austrians next and they were mostly here because they couldn’t believe what they had heard. I had them tour the magical construction. I had another meeting, ugh, it was the Mogol Empire which I found was modern day India. They had many gifts for me and where here to establish an embassy. Basically it was proper in world governments to make nice with the magicians. He said they had over 150 million citizens which I didn’t really believe and they wanted land to colonize in America. I said his citizens could colonize the gulf but no he wanted sovereign land. No such land in Avalon for his people but they could immigrate. It was rough meetings and I later found out being a male was why they wanted me, women still were not respected.

For the rest of the year I installed plumbing in the Magi Academy’s first tower, made enough rails to connect Savannah and finally learned a new spell.

* Revitalize, Level 1 (0/100) (Healing Spell – tier 9) – restores a persons tissues and bones, leveling decreases amount of time, COST: varies

The spell was a long cast time. Usually 20 to 30 minutes but it did remove cancer, strengthen bones, clean arteries, improve organ function and did wonders for the vitality of a person. The magic cost was usually 5 to 8 and I had to be in contact with the person for the length of the cast. I cast the spell on every mage and family member. I also started using the spell on some of the older Magi Knights. The December testing for the knights and magic students went well. I had no children enrolled in the 8th class but we added 17 young mages. The knight class had 285 who passed the exams and we got the number down to 56 after the physical testing. Two failed the mental screening from Maya so the knights had 54. I thought the number was too big but was convinced it was needed. If we took 50 knights a year the legion would grow to over a 1000. That seemed excessive. But the knights were making a name for themselves. Also at the academy I learned Damien had reforged his magic core shell, allowing his ability points to reach 4. He used those two points for a strength and speed buff allowing him to excel in the knight legion.